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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

RUSSELL, WANDA Z

ART UNIT

PAPER NUMBER

2616

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/689,601	Applicant(s) SARKKINEN, SINIKKA	
	Examiner WANDA Z. RUSSELL	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 19 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 19, and 21-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/15/2008 has been entered.

Claim Objections

2. Claims 20-25 are objected to because of the following informalities:

There are two claim 21s. Claims second 21-25 should be renamed as 22-26, and change the dependency accordingly. For examination on the merits, the claims will be interpreted as the best understood.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-8, 10-11, 13-16, 19, 21 (second 21), and 23-26 (22-25)** are rejected under 35 U.S.C. 102(b) as being anticipated by Raith (U.S. Patent 5,930,706).

For **claim 1**, Raith teaches a method comprising:

Receiving a broadcast service notification (receive a page, refer to col. 22, line 65) from a network (system, col. 22, line 54 & lines 62-66) in response to a network-initiated creation of a service context (system-related information, refer to col. 20, lines 61-63; and pages, refer to col. 22, line 62); and

switching (acquisition, refer to col. 21, line 1) a connection state (sleep mode, refer to col. 21, line 1. Sleep mode is a connection state) of a terminal device (mobile station, col. 20, line 63) to a dedicated channel state (IS-136 will “wake up” to read its PCH slot, and acquisition at DCCH, refer to col. 23, lines 26-27, and col. 21, line 2 & lines 1-2. Also refer to col. 1, lines 8-12) in which a dedicated physical channel is allocated to said terminal device (mobile station, col. 20, line 63), after reception of configuration parameters (DCCH structure parameters, refer to col. 21, line 7) for a broadcast or multicast service to said terminal device from a related control channel (BCCH, refer to Fig. 3, and col. 21, lines 1-8).

For **claim 2**, Raith teaches a method according to claim 1, wherein said broadcast or multicast service is an Multimedia Broadcast/Multicast Service (various data, col. 6, line 22; short messages, col. 21, lines 5-6; and point-to-multipoint, col. 21, line 5).

For **claim 3**, Raith teaches a method according to claim 1, wherein said notification triggers said terminal device to listen to said related control channel (The mobile station will first read the required BCCH information when acquiring the DCCH, refer to col. 21, lines 50-51).

For **claim 4**, Raith teaches a method according to claim 1, wherein said notification allows said terminal device not to respond to the received service indication (stay in sleep mode, col. 21, lines 52-54).

For **claim 5**, Raith teaches a method according to claim 1, wherein said switching is performed after reception of said configuration parameters from said related control channel (IS-136 will “wake up” to read its PCH slot, and acquisition at DCCH, refer to col. 23, lines 26-27, and col. 21, line 2 & lines 1-2. For DCCH structure parameters, refer to col. 21, line 7).

For **claim 6**, Raith teaches a method according to claim 5, wherein said state switching is ordered by a network element based on said configuration parameters (refer to Fig. 1. Any network element can start the order. For DCCH structure parameters, refer to col. 21, line 7).

For **claim 7**, Raith teaches a method according to claim 6, wherein said state switching order is issued to said terminal device and said network element derives the current state of said terminal device based on said state switching order (each superframe, refer to col. 5, lines 1-5. Note that superframes are in order).

For **claim 8**, Raith teaches a method according to claim 1, wherein said connection state is switched to said dedicated channel state (DCCH, refer to col. 21, line 2) from a paging channel state (PCH, refer to col. 21, line 15, and col. 5, lines 1-5).

For **claim 10**, Raith teaches a method according to claim 1, wherein said service notification caused by a network-initiated activation of a service data transmission (refer to Fig. 1, and system-related information, col. 20, lines 61-63).

For **claim 11**, it is an apparatus (apparatus, refer to col. 5, line 61) claim corresponding to method claim 1, therefore it is rejected for the same reason above.

For **claim 13 and 15**, they are apparatus (apparatus, refer to col. 5, line 65) claims corresponding to method claim 9, therefore it is rejected for the same reason above.

For **claim 14**, it is an apparatus (apparatus, refer to col. 5, line 65) claim corresponding to method claim 8, therefore it is rejected for the same reason above.

For **claim 16**, it is apparatus claim corresponding to apparatus claim 11 but from a base station site, therefore it is rejected for the same reason above.

For **claim 19**, it is means for claim corresponding to apparatus claim 11, therefore it is rejected for the same reason above.

For **claims 21 (second 21) and 23 (22)**, they are method claims corresponding to apparatus claims 1 and 8 respectively, but from a base station site, therefore they are rejected for the same reason above.

For **claims 24-26 (23-25)**, they are means for claims corresponding to method claims 21-23 (two 21s, and 22) respectively, therefore they are rejected for the same reason above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 9, 12, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Raith (U.S. Patent 5,930,706), in view of Chen (Pub No. US 2002/0126636).

For **claim 9**, Raith teaches a method claimed as applied above (see claim 1 and 8). In addition, Raith substantially teaches a method according to claim 8, wherein said connection state is switched from a CELL-PCH (PCH, col. 21, line 15) state to a CELL-DCH (DCCH, col. 21, line 2).

However, Raith fails to specifically teach UMTS radio access network.

Chen teaches UMTS radio access network (Title, and [0003]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Raith with Chen to obtain the invention as specified, for comprising a Core Network-operating Multi-Protocol Label Switching.

For **claim 12**, Raith teaches an apparatus claimed as applied above (see claim 11).

However, Raith fails to specifically teach GGSN.

Chen teaches a system, wherein said broadcasting means is a GGSN (Fig. 1).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Raith with Chen to obtain the invention as specified, for more choices of services, in the communication system.

For **claim 22**, it is method claim corresponding to apparatus claim 12, but from a base station site, therefore it is rejected for the same reason above.

Response to Amendment

7. Applicant's amendment filed 7/15/2008 has been received and considered.

Response to Arguments

8. Applicant's arguments filed 7/15/2008 have been fully considered but they are not persuasive.

9. Applicant argues that a connection state of the terminal device is switched to a dedicated channel state in response to a broadcast service notification as claimed, and by contrast, Raith discloses an efficient sleep mode operation of a mobile terminal which allows the mobile station to stay in sleep mode when there is no change in the structure parameters of a cell specific digital control channel (DCCH). A separate point-to-multipoint channel (BCCH) is used for broadcasting structure parameters to decouple the requirement of a mobile station by periodically reading the overhead information for efficient sleep mode operation from the requirement of the system which periodically reads the BCCH transmission for fast acquisition at the cell station. The mobile station reads only changed BCCH information and can stay in sleep mode when there is no change in the BCCH information.

In response, the Examiner respectfully disagrees.

Raith discloses "receive a page, refer to col. 22, line 65" and "IS-136 will 'wake up' to read its PCH slot, and acquisition at DCCH" (refer to col. 23, lines 26-27, and col. 21, line 2 & lines 1-2). Acquisition at DCCH is dedicated channel state as claimed. The sleep mode is equivalent to "idle" state described in applicant's Fig. 2.

In addition, Raith discloses "The present invention relates to wireless communication systems and, more particularly, to a method and apparatus for detecting messages transmitted over a communications channel such as a paging channel (PCH) defining part of a digital control channel (DCCH) in a cellular radio system" (refer to col. 1, lines 8-12).

Regarding the BCCH, applicants states "the Examiner argues that the PCH and the BCCH are part of the DCCH, referring to Fig. 3 and col. 23, lines 25-32 of Raith. Applicant respectfully further disagrees with this interpretation of the disclosure of Raith". This argument is persuasive, however, from Fig. 11 of Raith, and col. 20, lines 52-65, Raith discloses "Referring next to FIG. 11 which shows the frame structure of the (downlink) DCCH according to IS-136, the DCCH slots are mapped into logical channels ... The logical channels specified in IS-136 include a broadcast control channel (BCCH) for carrying system-related information which is broadcast to all mobile stations. It can be seen that DCCH and BCCH are not separate channels."

10. Rejections of dependent claims remain effective.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WANDA Z. RUSSELL whose telephone number is (571)270-1796. The examiner can normally be reached on Monday-Thursday 9:00-6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wanda Z Russell/
Examiner, Art Unit 2616

/Kevin C. Harper/
Primary Examiner, Art Unit 2616